Output tables for 1xN statistical comparisons.

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1 Average rankings of Friedman test

Average ranks obtained by each method in the Friedman test.

Algorithm	Ranking
MEABC	6.2069
ABCADE	3.7931
ABCNG	4.931
SHADE	3.2931
MAPSO	4.5172
TAPSO	3.6552
MEEABC	1.6034

Table 1: Average Rankings of the algorithms (Friedman)

Friedman statistic (distributed according to chi-square with 6 degrees of freedom): 77.116995.
P-value computed by Friedman Test: 0.

2 Post hoc comparison (Friedman)

P-values obtained in by applying post hoc methods over the results of Friedman procedure.

i	algorithm	$z = (R_0 - R_i)/SE$	p	Holm Hochberg Hommel	Holland	Rom
6	MEABC	8.114539	0	0.008333	0.008512	0.008764
5	ABCNG	5.865566	0	0.01	0.010206	0.010515
4	MAPSO	5.136169	0	0.0125	0.012741	0.013109
3	ABCADE	3.859725	0.000114	0.016667	0.016952	0.016667
2	TAPSO	3.616593	0.000299	0.025	0.025321	0.025
1	SHADE	2.97837	0.002898	0.05	0.05	0.05

Table 2: Post Hoc comparison Table for $\alpha = 0.05$ (FRIEDMAN)

Bonferroni-Dunn's procedure rejects those hypotheses that have an unadjusted p-value ≤ 0.008333.
Hochberg's procedure rejects those hypotheses that have an unadjusted p-value ≤ 0.05.
Hommel's procedure rejects all hypotheses.
Rom's procedure rejects those hypotheses that have an unadjusted p-value ≤ 0.05.

3 Adjusted P-Values (Friedman)

Adjusted P-values obtained through the application of the post hoc methods (Friedman).

i	algorithm	unadjusted p	p_{Bonf}	p_{Holm}	$p_{Hochberg}$	p_{Hommel}
1	MEABC	0	0	0	0	0
2	ABCNG	0	0	0	0	0
3	MAPSO	0	0.000002	0.000001	0.000001	0.000001
4	ABCADE	0.000114	0.000681	0.000341	0.000341	0.000341
5	TAPSO	0.000299	0.001791	0.000597	0.000597	0.000597
6	SHADE	0.002898	0.017387	0.002898	0.002898	0.002898

Table 3: Adjusted p-values (FRIEDMAN) (I)

i	algorithm	unadjusted p	$p_{Holland}$	p_{Rom}
1	MEABC	0	0	0
2	ABCNG	0	0	0
3	MAPSO	0	0.000001	0.000001
4	ABCADE	0.000114	0.000341	0.000341
5	TAPSO	0.000299	0.000597	0.000597
6	SHADE	0.002898	0.002898	0.002898

Table 4: Adjusted p-values (FRIEDMAN) (II)